



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
**COMMISSION ON WATER RESOURCE MANAGEMENT**  
P.O. BOX 621  
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

January 19, 2021  
Honolulu, O'ahu

Request Approval of Applications for  
A) Ground Water Use Permit (GWUP) No. 01096 - Existing Industrial Use for 1.901 mgd  
and  
B) Well Construction Modification and Pump Installation Permits for Existing  
Yacht Harbor 1, 2 and 3 Wells  
(Well Nos. 3-1750-012, 3-1750-013 and 3-1750-022, respectively)  
and Yacht Harbor Monitor Well, 3-1750-023  
TMK (1) 2-3-036:039,  
Nu'uuanu Ground Water Management Area, O'ahu

<u>Consultants</u>	<u>Applicant</u>	<u>Well / Land Owner</u>
Cummings 841 Bishop St. Honolulu, HI 96813	Yacht Harbor Towers 1600 Ala Moana Boulevard Honolulu, HI 96815	Yacht Harbor Towers 1600 Ala Moana Boulevard Honolulu, HI 96815
Tom Nance Water Resource Engineering 560 N. Nimitz Hwy. Suite 213 Honolulu, HI 96813		

SUMMARY OF REQUEST:

The applicant requests that the Commission approve a ground water use permit for an allocation of 1.901 million gallons per day (mgd) of salt water from two existing wells and one new well to supply water to a heat exchange system for the Yacht Harbor Towers apartment complex.

LOCATION MAP: See Exhibit 1

BACKGROUND:

The Yacht Harbor Towers were completed in 1973. Two wells, Yacht Harbor 1 well (3-1750-012) and Yacht Harbor 2 well (3-1750-013) were constructed in 1972. Since then, they have been used for the air conditioning system for the Yacht Harbor Towers. The most recent NPDES permit (permit no. HI 0020346) was obtained on August 5, 2019 from the Department of Health for the discharge of the pumped water into the Ala Wai Canal. As part of our water use reporting outreach focusing on water management areas, these two wells were field inspected on Feb 23, 2016 and found to be producing saltwater.

These two wells were registered in 1987. At the time, caprock wells were not considered as part of the basal ground water and thus no direction was given to Yacht Harbor Towers to apply for a ground water use permit to continue this use. Also, as in some instances at the beginning of the implementation of the State Water Code, some salt water wells were not directed to do so either.

Nonetheless, current practice is to require salt water wells to obtain ground water use permits if they are within an aquifer system area, though the quantities are not deducted from sustainable yield since the water is not taken from the aquifer lens. Therefore, Yacht Harbor Towers is applying for this ground water use permit to come into compliance with current practice. However, staff does not feel that this late submission warrants a violation because of the ambiguous implementation of ground water use permits for salt water wells at the time of the initial implementation of the State Water Code and the minimal risk these wells, depending on construction and location pose to the public resource.

The two injection wells were approved by the Department of Health (DOH) on May 20, 2019 with the intent of injecting the warm water into the caprock. They have been drilled but not cased. To be clear, injection wells are not approved by the Commission, and are solely approved by DOH. Because they are now being converted to CWRM regulated wells (3 production and 1 long-term monitoring), they now require CWRM approvals. However, the applicant has decided to continue the practice of discharging the warm reject water into the Ala Wai Canal under the existing DOH NPDES permit.

The applicant is proposing to convert one of these injection wells into a production well (Yacht Harbor 3 well - State Well No. 3-1750-022), and one of them into a deep monitor well (Yacht Harbor Monitor well - State Well No. 3-1750-023).

On May 5, 2020, on behalf of Yacht Harbor Towers, consultant Cumming submitted a ground water use permit application to the Commission on Water Resource Management (Commission) but lacked the proper information for the application to be deemed as complete. Additional information was provided and the application was deemed complete on October 16, 2020.

Additional information regarding the source, use, and notification is provided in Exhibit 2.

The public notice (Exhibit 3) for this application was published in the Star Advertiser on November 13, and November 20, 2020, with objections due on December 4, 2020. No objections were filed on this water use permit application.

ANALYSIS/ISSUES:

Section 174C-49(a) of the State Water Code establishes seven (7) criteria that must be met to obtain a water use permit. An analysis of the proposed permit in relation to these criteria follows:

(1) Water availability

Though the well is in the Nu‘uanu Aquifer System Area, it does not withdraw from the basal freshwater lens and is within the saltwater portions of the overlying caprock formation, which is 800-1,000 feet thick below mean sea level above the Ko‘olau basalt. As such, withdrawals from these caprock sources do not count against the basal sustainable yield. Therefore, there is adequate salt water available to accommodate this application request.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" is

*"...the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest".*

*I. Purpose of Use*

The applicant is requesting the use of salt water for industrial heat exchange purposes. This is considered an industrial use of water. The Declaration of Policy section, §174C-2(c) HRS, states that the Water Code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for various purposes, which includes industrial uses.

*II. Quantity Justification*

The applicant is requesting a total of 1.901 mgd of cold salt water for industrial heat exchange purposes. The flow rate of the heat exchanger is designed for 1,320 gallons per minute. Old Commission data shows that the Yacht Harbor 1 and 2 wells had 1,800 gpm pumps each in them, but the consultant states that these pumps are old and the actual quantity generated from them is 600 gpm and 900 gpm respectively based on actual flow rates. Additionally, these pumps are only run one at a time and therefore can't meet the 1,320 gpm (new) design requirement.

Because the heat exchange design is currently undersized, air is probably not cooled efficiently or to an acceptable temperature. The proposed usage will be for the new well, Yacht Harbor 3, to be run 24 hours per day, with the two existing wells as backup. The capacity will be 1,320 gpm (or 1.901 mgd) to meet the needs described above.

Because it's difficult to have a "standard" quantity for cooling designs that need to be engineered with factors including efficiency, temperature, peak demands, etc., the Commission doesn't have any standards for quantities associated with air conditioning heat exchange. This can be explored further in future updates to the water resource protection plan as cooler non-potable ground water is currently a significant source of cooling. However, this should not be too much of a concern

because the source is salt water from the estimated 800-1000 ft thick below sea level caprock in the Yacht Harbor location, which doesn't deduct from the underlying basal sustainable yield. Presumably, the operator doesn't want to expend more energy for their purposes than they need to.

Based on those premises, staff is confident that the proposed withdrawal is appropriate.

### *III. Efficiency of Use*

The applicant states that the minimum flow rate of salt water through the air conditioning heat exchangers varies based on the air conditioning demand via an automation system. A minimum flow rate is set to provide proper heat extraction from the air conditioning system to minimize energy and saline ground water usage. Minimization of energy, related costs, and water usage reflects an efficient use of water.

### *IV. Analysis of Practical Alternatives*

As part of the application process, the applicant was asked to explain why there is not an alternative to the use of salt water. An analysis of each of the alternatives is as follows:

1. **Municipal sources.** The applicant states that municipal water is not cold enough to provide proper heat extraction, and even if it was, the cost would be prohibitive. Also, using fresh potable water for non-potable needs doesn't match the Commission's general policy of having fresh potable used for the highest and best needs. Staff agrees with this assessment.
2. **Wastewater.** The applicant consulted with the City and County's Department of Environmental Services, Wastewater systems, and found that reuse water is not available. And if it was available, again, temperature requirements would negate it as an option. Staff agrees with this assessment.
3. **Ditch system.** Applicant verified with Department of Agriculture that no ditch systems are available in the vicinity of the wells, and again, the temperature requirement would negate it as an option. Staff agrees with this assessment.
4. **Surface water.** Ala Wai Canal is adjacent to the Yacht Harbor Towers, but again temperature requirements negate it as an option. Additionally, the solids and organics would reduce the effectiveness of the heat exchangers even if it was an option. Staff agrees with this assessment.

Based on these answers, staff does not feel that there are practicable alternatives available to applicant, to the use of salt water.

Overall, analysis of these four sections above staff finds the use of salt water for industrial cooling purposes to be reasonable and beneficial.

### (3) Interference with other existing legal uses

There are 50 other wells currently in use within 1 mile of this source (refer to Exhibit 1). The majority of these wells are old and abandoned with only 15 currently active caprock wells. Use of salt water is not anticipated to impact any of these wells, which are already 80% to 100% saltwater.

(4) Public interest

Public interest is defined under §174C-2 - Declaration of policy, as follows:

*“(c) The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.”*

The interpretation of the state water code to obtain maximum beneficial use of waters from the state includes industrial uses such as the use under this application. There have been no public comments or objections to this application.

Staff feels that with the research done into DHHL rights, and because withdrawal of salt water will have minimal effect on the freshwater lens, adequate provisions have been made to ensure the protections described in the second sentence of §174C-2.

Therefore, this application meets the criteria to be in the public interest.

(5) State & county general plans and land use designations

The proposed uses are in the State Urban District, and the county zoning is A-2. The apartment complex is appropriate in these land use and zoning designations.

Therefore, this application meets the state & county general plans and land use designations.

(6) County land use plans and policies

Again, normal County review includes Office of the Mayor, Department of Planning and Permitting and the Board of Water Supply. No comments or objections have been made.

Therefore, this application meets the county land use plans and policies.

(7) Interference with Hawaiian home lands rights

All permits are subject to the prior rights of Hawaiian home lands. The Department of Hawaiian Home Lands (DHHL) and the Office of Hawaiian Affairs have reviewed this application. The Department of Hawaiian Home Lands confirmed in a letter to the applicant dated September 23, 2020 that the proposed wells will not interfere with its rights as it does not own any lands near the Yacht Harbor Towers. Further, standard water use permit conditions 3.g., 6., and 9.f. notify all water use permittees that their permits are subject to and cannot interfere with Hawaiian home land rights.

Therefore, staff does not anticipate that approval of this permit will interfere with Hawaiian home lands rights.

(8) Other issues

*I. Chapter 343 – Environmental Assessment (EA) Compliance*

**EA Triggers**

In accordance with §HRS 343-5(a), the applicant's proposed action does not trigger the need for an EA (identify applicable triggers: based on the (1) use of state land; (2) use of county land; (3) use of state funds; (4) use of county funds; (5) use of conservation district lands; (6) use with shoreline setback area; (7) use of historic site designated on the National register; (8) use of historic site designated on the Hawaii register; (9) use of land in the Waikiki Special District; (10) amendment to county general plan which results in designations other than agriculture, conservation or preservation not initiated by the county; (11) proposes any reclassification of conservation land by LUC; (12) relationship to the construction/modification of helicopter facilities that may affect conservation district lands/a shoreline setback area/a historic site; (13) proposal to build (a) wastewater treatment units (except IWS or WTU serving <50 SFR dwellings or the equivalent, (b) waste-to-energy facility (c) landfill, (d) oil refinery, (e) power generating facility.

*II. Traditional and Customary Practices*

***Ka Pa‘akai Analysis***

In *Ka Pa‘akai O Ka‘aina v. Land Use Commission*, the Hawai‘i Supreme Court recognized that the State has an obligation to protect Hawaiian traditional and customary practices to the extent feasible, and that the proponent of an action must show sufficient evidence that these types of practices are protected, if they exist in the location in question. This “Ka Pa‘akai framework” was created by the Court “to help ensure the enforcement of traditional and customary native Hawaiian rights while reasonably accommodating competing private development interests.” The Commission is obligated to conduct a “Ka Pa‘akai analysis” of a proposed action requiring CWRM approval independent of the entity proposing the action. This analysis should be used to inform any decision on the impact of the proposed action on traditional and customary practices.

Consequently, the Court required an assessment of the following:

(1) “the identity and scope of ‘valued cultural, historical, or natural resources’ in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;

-The OHA Kipuka database shows no sites or crown lands involved.

-SHPD’s has not responded but in the past has commented in areas of highly developed and disturbed areas that impacts to historic archeological sites are unlikely.

(2) “the extent to which those resources -- including traditional and customary native Hawaiian rights -- will be affected or impaired by the proposed action;” and

- the applicant believes the use of saline groundwater will have no impact on traditional and customary Hawaiian Rights or on fish and wildlife.

(3) “the feasible action, if any, to be taken ... to reasonably protect native Hawaiian rights if they are found to exist.”

- The monitor well is a mitigating action that will provide for data collection to see changes to the aquifer. The NPDES (see Exhibit 7) permit has monitoring requirements to see changes in the discharge water into the Ala Wai Canal. These monitoring requirements and standard conditions of the water use permit conditions and well permits shall not interfere with any existing legal use of water (standard GWUP condition 3.c. and DHHL related conditions mentioned earlier.)

### III. 2004 Hawai‘i Well Construction and Pump Installation Standards (HWCPIIS) Analysis

All well construction permits are subject to the 2004 HWCPIIS Section 2.2 authorized under Hawai‘i Administrative Rule HAR §13-168-14 (a) and Hawai‘i Revised Statute HRS §174C-86. The pertinent issues for salt water well construction is mainly under Section 2.4 Well Casing requiring that salt water wells be cased and grouted through fresh and brackish portions of an aquifer to avoid salt water intrusion. The two current production wells are developing water around 68-80 feet below sea level while the two injection wells are deeper 200 to 400 feet below sea level as they were originally designed as injection wells but now seek to develop 1 for production at water and the deeper well shall be the monitor well. See Exhibit 2. Grouting to -95 ft below sea level for the converted injection wells less than 75 feet away from the Ala Wai should be sufficient to ensure.

### IV. Consistency with Hawai‘i Water Plan, 2019 Water Resource Protection Plan (WRPP)

Section J.3 Other Water Conservation Plans and Programs of the WRPP refers to the *Prototype Water Conservation Plan for the Department of Land and Natural Resources* and the *Water Conservation Manual for State of Hawai‘i Facilities* that are available on CWRM’s website at <http://www.hawaii.gov/dlnr/cwrmp/planning/conserv.htm>. The conservation manual states under goal 5.2.4 Goal 3 to explore policy changes to proactively plan for the expanded use of reclaimed water for agriculture, landscaping, irrigation, recharge, and industrial uses, though this seems more related to the use of non-saltwater aquifer resource and reclaimed water is probably more useful for power plant thermal cooling as opposed to building air conditioning. The plan also discusses best management plans for efficient tower cooling.

### V. Agency Review

Normal agency review for the water use permit application includes:

- 1) the State’s Department of Land and Natural Resources (DLNR) and its State Parks, Aquatic Resources, Historic Preservation, and Land Divisions; the Department of Health (DOH) with its Clean Water, Safe Drinking Water, and Wastewater Branches; the Department of Hawaiian Home Lands (DHHL), and Land Use Commission (LUC); and the Office of Hawaiian Affairs (OHA).
- 2) the Office of the Mayor, Department of Planning and Permitting, and the Board of Water Supply;

Only the Division of Aquatic Resources commented concern about the release of possible contaminants (heavy metals, etc.) and the increased water temperatures from the used saltwater may have an impact aquatic biota and habitat. Water quality monitoring or testing should be

conducted before and after saltwater use and the release of the used saltwater be diffused as much as possible to minimize the effects of the heated saltwater. Staff believes the DOH NPDES permit addresses these concerns.

#### Well Construction and Pump Installation Permits for Yacht Harbor 3 & Monitor Well

Though they are typically administratively approved permits so long as they meet the 2004 Hawai'i Well Construction and Pump Installation Standards, Well Construction and Pump Installation permits are presented to the Commission for approval when applied for in conjunction with a water use permit application, as it is in this case. The well and pump design are in compliance with the Hawaii Well Construction and Pump Installation Standards.

#### RECOMMENDATION:

Staff recommends that the Commission:

- A. Approve the issuance of ground water use permit (GWUP) no. 01096 to Yacht Harbor Towers for the reasonable and beneficial use of 1.901 million gallons per day of salt water for industrial cooling use from the Yacht Harbor 1, 2 and 3 wells (Well No. 3-1750-012, -013 and -022), and subject to the standard water use permit conditions listed in Exhibit 4 and the following special conditions:
  1. This permit is subject to suspension and/or revocation if the use changes. This includes, but is not limited to: type of use, location of use, land use classification changes, or anything that varies from the application.
  2. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.
  3. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.
  4. Standard Condition 16 for a water shortage plan requirement is waived.
  5. The landowner shall provide or allow Commission staff to perform quarterly conductivity-temperature-depth profiles of the Monitor Well (Well No. 1750-023)
- B. Approve well construction permits for Yacht Harbor 3 (Well No. 3-1750-022) and Yacht Harbor Monitor Well ((Well No. 3-1750-023), subject to the standard well construction permit conditions as described in Exhibit 5.



- C. Approve a pump installation permit for Yacht Harbor 3 (Well No. 3-1750-022), subject to the standard pump installation permit conditions as described in Exhibit 6.

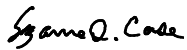
Respectfully submitted,



M. KALEO MANUEL  
Deputy Director

- Exhibits:
- 1 (Location Map)
  - 2 (Water Use Permit Detailed Information)
  - 3 (Public Notice)
  - 4 (Water Use Permit Standard Conditions)
  - 5 (Well Construction Permit Standard Conditions)
  - 6 (Pump Installation Permit Standard Conditions)
  - 7) NPDES HI 0020346

APPROVED FOR SUBMITTAL:



SUZANNE D. CASE  
Chairperson

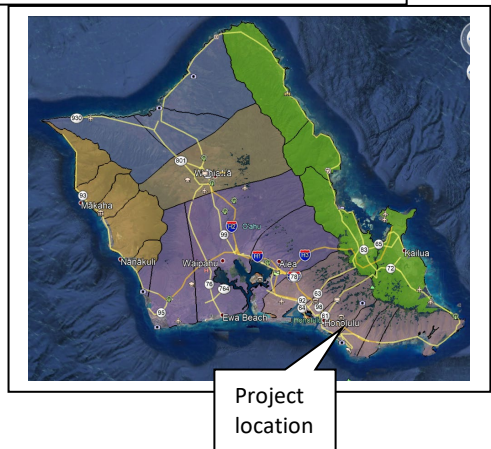


EXHIBIT 1: LOCATION MAP



Well Number	Aquifer System	Well Name	Well Owner/Operator	Water Use Reporter	Land Owner	TMK	Use	Year Drilled	Latest 12-MAY	Last Reported Date	Distance (miles)
3-1750-001	30102 Nuuanu	McCully	City & County of Honolulu, C&CH				ABNSLD	1881			0.52
3-1750-002	30102 Nuuanu	McCully	Y. Kam				ABNSLD	1890			0.74
3-1750-003	30102 Nuuanu	McCully	Diamond Bakery				ABNSLD	1890			0.68
3-1750-004	30101 Palolo	Waikiki	Hilton Hawaiian Villages LLC		Hilton Hawaiian Villages LLC	(1) 2-6-008:034	ABNLOS	1950			0.48
3-1750-005	30102 Nuuanu	McCully	Times Market	Derek Luke (Times Market)	Silverlode INC	(1) 2-8-001:001	UNU	1953	0.000	11/23/2020	0.72
3-1750-006	30101 Palolo	Waikiki	Hilton Hawaiian Villages LLC		Hilton Hawaiian Villages LLC	(1) 2-6-008:034	ABNLOS	1955			0.46
3-1750-007	30101 Palolo	Waikiki	Hilton Hawaiian Villages LLC		Hilton Hawaiian Villages LLC	(1) 2-6-009:009	ABNLOS	1955			0.38
3-1750-008	30101 Palolo	Waikiki	Hilton Hawaiian Villages LLC		Hilton Hawaiian Villages LLC	(1) 2-6-009:009	ABNLOS	1955			0.38
3-1750-009	30102 Nuuanu	Ala Moana	HIH Pagoda Operating Company LLC	Yodie Mizukami (HIH Pagoda Operating Company LLC)	Kamehameha Schools, KS	(1) 2-3-017:016	IRRLA	1964	0.108	11/30/2020	0.52
3-1750-010	30102 Nuuanu	Ala Moana	GGP Ala Moana L.L.C.	Liliana Ballesteros (Brookfield Properties)	GGP Ala Moana L.L.C.	(1) 2-3-038:001	OTH	1967	0.000	7/16/2020	0.15
3-1750-011	30102 Nuuanu	Ala Moana	GGP Ala Moana L.L.C.	Liliana Ballesteros (Brookfield Properties)	GGP Ala Moana L.L.C.	(1) 2-3-038:001	ABNLOS	1967	0.000	7/16/2020	0.17
3-1750-012	30102 Nuuanu	Yacht Harbor 1	Yacht Harbor Towers	Gail Lum (Hawaiian Building Maintenance)	Yacht Harbor Towers	(1) 2-3-036:039	INDEL	1972	0.225	2/23/2016	0.06
3-1750-013	30102 Nuuanu	Yacht Harbor 2	Yacht Harbor Towers	Gail Lum (Hawaiian Building Maintenance)	Yacht Harbor Towers	(1) 2-3-036:039	INDEL	1972	0.000	2/23/2016	0.05
3-1750-014	30101 Palolo	Hilton Lagoon	Peter Schall (Hilton Hawaiian Villages LLC)	John Clarke (Hilton Hawaiian Villages LLC)	Peter Schall (Hilton Hawaiian Villages LLC)	(1) 2-6-009:010	UNU	2003	0.000	11/30/2020	0.38
3-1750-015	30101 Palolo	HHV 1	Hilton Hawaiian Villages LLC	John Clarke (Hilton Hawaiian Villages LLC)	State of Hawaii, Department of Transportation, Harbors Division, DOT	(1) 2-3-037:021	IRRHOT	2005	13.282	11/30/2020	0.38
3-1750-016	30101 Palolo	HHV 2	Hilton Hawaiian Villages LLC	John Clarke (Hilton Hawaiian Villages LLC)	State of Hawaii, Department of Transportation, Harbors Division, DOT	(1) 2-3-037:021	IRRHOT	2005	0.000	11/30/2020	0.38
3-1750-017	30101 Palolo	HHV 3	Hilton Hawaiian Villages LLC	John Clarke (Hilton Hawaiian Villages LLC)	State of Hawaii, Department of Transportation, Harbors Division, DOT	(1) 2-3-037:021	IRRHOT	2005	0.000	11/30/2020	0.40
3-1750-018	30101 Palolo	HHV 4	Hilton Hawaiian Villages LLC	John Clarke (Hilton Hawaiian Villages LLC)	State of Hawaii, Department of Transportation, Harbors Division, DOT	(1) 2-3-037:021	IRRHOT	2005	0.000	11/30/2020	0.40
3-1750-019	30101 Palolo	HHV 5	Hilton Hawaiian Villages LLC	John Clarke (Hilton Hawaiian Villages LLC)	State of Hawaii, Department of Transportation, Harbors Division, DOT	(1) 2-3-037:021	IRRHOT	2005	0.000	11/30/2020	0.42
3-1750-020	30101 Palolo	HHV 6	Hilton Hawaiian Villages LLC	John Clarke (Hilton Hawaiian Villages LLC)	State of Hawaii, Department of Transportation, Harbors Division, DOT	(1) 2-3-037:021	IRRHOT	2005	0.000	11/30/2020	0.44
3-1750-021	30101 Palolo	HHV 7	Hilton Hawaiian Villages LLC	John Clarke (Hilton Hawaiian Villages LLC)	State of Hawaii, Department of Transportation, Harbors Division, DOT	(1) 2-3-037:021	IRRHOT	2005	0.000	11/30/2020	0.44

## EXHIBIT 1: LOCATION MAP

3-1751-004	30102 Nuuanu	Ala Moana	1350 Ala Moana Condo	David Parks (1350 Ala Moana Condo)	1350 Ala Moana Condo	(1) 2-3-006:001 OTH	1967			0.55
3-1751-010	30102 Nuuanu	Waiea Source 1	Victoria Ward Ltd.	Gary Bryant (Waiea at Ward Village)	Victoria Ward Ltd.	(1) 2-3-001:127 INDOTH	2015	11/30/2020		0.99
3-1751-011	30102 Nuuanu	Waiea Source 2	Victoria Ward Ltd.	Gary Bryant (Waiea at Ward Village)	Victoria Ward Ltd.	(1) 2-3-001:127 INDOTH	2015	11/30/2020		0.98
3-1849-002	30102 Nuuanu	Manoa Valley	Howard Murai (Maui Lani Partners)			ABNSLD	1881			0.92
3-1849-006	30102 Nuuanu	Manoa Valley	Carl P & Eleanor C Mudrick	Carl P & Eleanor C Mudrick	Carl P & Eleanor C Mudrick	(1) 2-8-009:080 ABN	1891	5/31/2016		0.93
3-1849-007	30102 Nuuanu	Manoa Valley	Land Process Service Corp.	Jamey Retutal (Colliers International)	Kam, Wah Trust Est.	(1) 2-8-009:076 ABN	1891			0.92
3-1849-008	30102 Nuuanu	Manoa Valley	J. Shinn			ABNSLD	1894			0.91
3-1850-002	30102 Nuuanu	Makiki	Kamehameha Schools, KS		Kamehameha Schools, KS	(1) 3-9-010:001 ABNSLD	1880			0.81
3-1850-004	30102 Nuuanu	Makiki	B. Dillingham			(1) 3-9-010:001 ABNSLD	1882			0.90
3-1850-005	30102 Nuuanu	Makiki	M. Rawlins			(1) 3-9-010:001 ABNSLD	1882			0.78
3-1850-006	30102 Nuuanu	Makiki	James Dowsett (Mokuleia Land Co.)			(1) 3-9-010:001 ABNSLD	1882			0.96
3-1850-009	30102 Nuuanu	Makiki	State of Hawaii		State of Hawaii	ABNSLD	1882			0.86
3-1850-010	30102 Nuuanu	Makiki	Lin Yap			ABNSLD	1883			0.88
3-1850-011	30102 Nuuanu	Makiki	W. Dillingham			ABNSLD	1882			0.92
3-1850-012	30102 Nuuanu	Makiki	Howard Murai (Maui Lani Partners)			ABNSLD	1884			0.91
3-1850-014	30102 Nuuanu	Makiki	R. King			ABNSLD	1884			0.96
3-1850-015	30102 Nuuanu	Makiki	G. Wilcox 1			ABNSLD	1884			0.77
3-1850-016	30102 Nuuanu	Makiki	City & County of Honolulu, C&CH			ABNSLD	1886			0.85
3-1850-017	30102 Nuuanu	Makiki	Hawaiian Electric Company, Inc., HECO			ABNSLD	1887			0.98
3-1850-018	30102 Nuuanu	Makiki	J. Tanner			ABNSLD	1890			0.78
3-1850-019	30102 Nuuanu	Makiki	Jodo Mission			ABNSLD	1890			0.96
3-1850-020	30102 Nuuanu	Makiki	Plews & Wichman			ABNSLD	1891			0.66
3-1850-021	30102 Nuuanu	Makiki	Honolulu Board of Water Supply, BWS			ABNSLD	1894			0.69
3-1850-022	30102 Nuuanu	Makiki	Kamehameha Schools, KS			ABNSLD	1894			0.65
3-1850-026	30102 Nuuanu	Makiki	Il Estate			ABNSLD	1910			0.64
3-1850-027	30102 Nuuanu	Makiki	Meadow Gold			ABNSLD	1914			0.65
3-1850-028	30102 Nuuanu	Mckinley Aqua 1	McKinley High School	Cliff Lum (McKinley High School)	Hawaii State Department of Education, DOE	(1) 2-3-009:001 ABNLOS	1990	0.000	3/16/2020	0.90
3-1850-029	30102 Nuuanu	Mckinley Aqua 2	McKinley High School	Cliff Lum (McKinley High School)	Hawaii State Department of Education, DOE	(1) 2-3-009:001 AGRAQ	1993	0.039	3/16/2020	0.87

## EXHIBIT 1: LOCATION MAP



## WATER USE PERMIT DETAILED INFORMATION

### Source Information

**AQUIFER:** Nuuanu System, Honolulu Sector, Oahu  
Sustainable Yield: n/a

**WELL:** Yacht Harbor 1 (Well No. 3-1750-012)  
Location: TMK: (1) 2-3-036:039  
Year Drilled: 1972  
Construction details for this well are unknown

Consultant estimates that the casing is solid and grouted to 68' depth, and perforated casing goes from 68-80 foot depth. Consultant says that pump has to be within solid casing because 8" perforated casing is too small for the pump.

Pump Capacity 1,800 gpm

**WELL:** Yacht Harbor 2 (Well No. 3-1750-013)  
Location: TMK: (1) 2-3-036:039  
Year Drilled: 1972  
Construction details for this well are unknown

Consultant estimates that casing is solid and grouted to a depth of 40'. 8" perforated casing goes from 40-95 feet deep, but pump, like the previous well, has to be in the solid casing.

Pump Capacity 1,800 gpm

**WELL:** Yacht Harbor 3 (Well No. 3-1750-022)  
Location: TMK: (1) 2-3-036:039  
Year Drilled: Proposed new conversion of injection well  
Casing Diameter: 14 in.  
Elevations (msl= 0 ft.)  
    Water Level: 0 ft.  
    Ground: 6 ft.  
    Bottom of Solid Casing: -94 ft.  
    Bottom of Perforated: -194 ft.

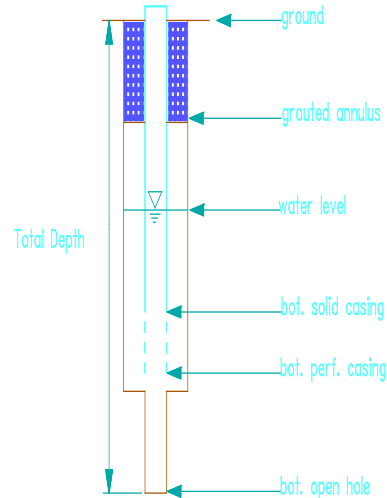
Total Depth: 200 ft.  
Grouted Annulus Depth: 95 ft.

Pump Capacity 1,320 gpm

**WELL:** Yacht Harbor Monitor (Well No. 3-1750-023)

## EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION

Location:	TMK: (1) 2-3-036:039
Year Drilled:	Proposed new conversion of injection well
Casing Diameter:	4 in.
<u>Elevations</u> (msl= 0 ft.)	
Water Level:	0 ft.
Ground:	6 ft.
Bottom of Solid Casing:	-94 ft.
Bottom of Perforated:	-445 ft.
Total Depth:	450 ft.
Grouted Annulus Depth:	95 ft.



#### Use Information

Quantity Requested:	1.901 million gallons per day
Existing Type of Water Use:	Industrial (heat exchange air conditioning)
Place of Water Use:	TMK: (1) 2-3-036:039

#### Nearby Surrounding Wells and Other Registered Ground Water Use

There are 50 other wells within a mile of the well (see Exhibit 1). 15 of these wells are currently in use.

## EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION

### Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Honolulu Advertiser on 11/13/2020 and 11/20/2020 and a copy of the notice was sent to the Office of the Mayor. Copies of the completed application were sent to the Board of Water Supply, Department of Planning and Permitting, Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, the various divisions within the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by December 4, 2020.

### Objections

The public notice specifies that an objector meet the following requirements: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; (3) state all grounds for objections to the proposed permits, (4) provide a copy of the objection letter(s) to the applicant, and (5) submit objections meeting the previous requirements to the Commission by .

To the best of staff's knowledge there are no objectors who have property interest within the Nuuanu Aquifer System or who will be directly and immediately affected by the proposed water use.

### Briefs in Support

Responses to objections, or briefs in support, regarding the application are required to be filed with the Commission ten (10) days after an objection is filed and, presumably, copies are served to the applicant. No briefs in support were filed with the Commission.

## EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION



## PUBLIC NOTICE

### Application for Water Use Permit Nuuanu Ground Water Management Area, Oahu

The Commission on Water Resource Management received the following water use permit application. Public Notice is given pursuant to Hawaii Administrative Rules, Section 13-171, "Designation and Regulation of Water Management Areas."

WUPA No. 01096 Yacht Harbor 1, 2 and 3 wells (Well No. 3-1750-012, -013 and -022)

Full application link: <https://dlnr.hawaii.gov/cwrm/newsevents/notices>

Applicant and Landowner: Yacht Harbor Towers  
1600 Ala Moana Boulevard  
Honolulu, HI 96815

Date Application Filed as Complete: October 16, 2020  
Hydrologic Unit / Aquifer System Area: Nuuanu System, Honolulu Sector, Oahu

#### Water Source

Well No.	Well Name	Tax Map Key	Aquifer System
3-1750-012	Yacht Harbor 1	(1) 2-3-036:039	Nuuanu System, Honolulu Sector, Oahu
3-1750-013	Yacht Harbor 2	(1) 2-3-036:039	Nuuanu System, Honolulu Sector, Oahu
3-1750-022	Yacht Harbor 3	(1) 2-3-036:039	Nuuanu System, Honolulu Sector, Oahu

Quantity Requested: 1.901 million gallons per day saltwater.

Proposed Use: Industrial

#### End Use

New/Existing	Description	Place of Water Use	Qty of Use (GPD)
Existing	AC heat exchange	at Tax Map Key: (1) 2-3-036:039	1,900,800

Written objections or comments on this application may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply, any person who will be directly and immediately affected by the proposed water use, or any other interested person. Written objections must (1) state the property or other interest in the matter (provide TMK information); (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permit. Written objections must be received by December 4, 2020. Objections must be sent to 1) the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809 and 2) the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT



M. KALEO MANUEL, Deputy Director for  
SUZANNE D. CASE, Chairperson

Dated: November 4, 2020

Publish in: Honolulu Star Advertiser issues of November 13, 2020 and November 20, 2020

### **STANDARD WATER USE PERMIT CONDITIONS**

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)
2. The right to use ground water is a shared use right.
3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
  - a. Can be accommodated with the available water source;
  - b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
  - c. Will not interfere with any existing legal use of water;
  - d. Is consistent with the public interest;
  - e. Is consistent with State and County general plans and land use designations;
  - f. Is consistent with County land use plans and policies; and
  - g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).
4. The ground water use here must not interfere with surface or other ground water rights or reservations.
5. The ground water use here must not interfere with interim or permanent instream flow standards. If it does, then:
  - a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
  - b. The interim or permanent instream flow standard, as applicable, must be amended.
6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.
7. The water use permit application and submittal, as amended, approved by the Commission at its meeting are incorporated into this permit by reference.
8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.
9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
  - a. protect the water sources (quantity or quality);
  - b. meet other legal obligations including other correlative rights;
  - c. insure adequate conservation measures;
  - d. require efficiency of water uses;
  - e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
  - f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
  - g. carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. An approved flowmeter(s) need not be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a basis (attached).
11. This permit shall be subject to the Commission's periodic review of the **Nuuanu** Aquifer System Area's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the **Nuuanu** Aquifer System Area, or relevant modified aquifer(s), is reduced.
12. A permit may be transferred, in whole or in part, from the permittee to another, if:
  - a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
  - b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.
13. The use(s) authorized by law and by this permit do not constitute ownership rights.
14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.
15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.
16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the **Nuuanu** Ground Water Management Area.
17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.
18. Special conditions in the attached cover transmittal letter are incorporated herein by reference.
19. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

#### EXHIBIT 4: WATER USE PERMIT STANDARD CONDITIONS

### STANDARD WELL CONSTRUCTION PERMIT CONDITIONS

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at <http://files.hawaii.gov/dlnr/cwrn/forms/APTR.pdf>). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit **may be reduced** in the event that the pump test does not support the capacity.
4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.
5. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.
6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.
7. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.
8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit <http://files.hawaii.gov/dlnr/cwrn/forms/WCR1.pdf> for current form).
9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.
10. The well construction permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
11. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
12. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.
13. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

### EXHIBIT 5: WELL CONSTRUCTION PERMIT STANDARD CONDITIONS

14. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.
15. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
16. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with §13-168-12(f), HAR.
17. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

### **STANDARD PUMP INSTALLATION PERMIT CONDITIONS**

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.
3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
4. The pump installation permit shall be for installation of a gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.
5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.
6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.
7. Well Completion Report Part II shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit <http://files.hawaii.gov/dlnr/cwrp/forms/WCR2.pdf> for current form).
8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.
9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
10. If the HWCPIs are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
11. Any variances from the HWCPIs shall be approved by the Chairperson **prior** to invoking the variance.
12. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.
13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
14. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

### **EXHIBIT 6: PUMP INSTALLATION PERMIT STANDARD CONDITIONS**

PERMIT NO. HI 0020346

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq.; the "Act"); Hawaii Revised Statutes (HRS), Chapter 342D; and Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55, Department of Health (DOH), State of Hawaii,

**ASSOCIATION OF UNIT OWNERS  
YACHT HARBOR TOWERS**

(hereinafter "PERMITTEE"),

is authorized to discharge non-contact cooling water to the receiving water named Ala Wai Canal, through Outfall Serial No. 001 at coordinates:

Outfall Serial No.	Effluent Description	Outfall Latitude	Outfall Longitude
001	Non-contact cooling water from air conditioning chilled water system of Yacht Harbor Towers	21°17'37" N	157°50'48" W

from the air conditioning chilled water system of Yacht Harbor Towers located at 1600 Ala Moana Boulevard, Honolulu, Hawaii 96815

in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the DOH "Standard NPDES Permit Conditions," that is available on the DOH, Clean Water Branch (CWB) website at <http://health.hawaii.gov/cwb/site-map/home/standard-npdes-permit-conditions/>

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2018, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

Failure to comply with any condition, requirement, and/or limitation in this permit is an enforceable violation and your NPDES permit may be terminated. Examples of enforceable violations include, but are not limited to: Unauthorized discharges where a pollutant was not disclosed in the NPDES application, but was detected by monitoring only requirements in the NPDES permit or by other means determined by the DOH; failure to sample, analyze, or submit water quality results as required in the NPDES

**FINAL PERMIT  
August 5, 2019**

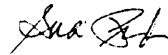
**EXHIBIT 7 - NPDES HI 0020346**

permit; and discharging pollutants in locations that were not authorized in the NPDES permit. If you violate Hawaii Revised Statutes (HRS), Chapter 342D, you may be subject to penalties of up to \$25,000 per violation per day and up to two years in jail.

Falsification of information, including providing information in the NPDES application that does not match what is actually occurring at the project site/facility, may result in criminal penalties for the Permittee and their authorized representative as provided in Clean Water Act, Section 309 and HRS, Section 342D-35

This permit shall become effective **October 1, 2019**. This permit and the authorization to discharge will expire at midnight, **October 1, 2024**. The Permittee shall submit a renewal application at least one (1) year prior to the expiration date of this permit.

Signed this 5<sup>th</sup> day of August, 2019.



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(For) Director of Health

**FINAL PERMIT**  
**August 5, 2019**



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ATTACHMENT: STANDARD NPDES PERMIT CONDITIONS (Version 15)

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning with the effective date of this permit and lasting through October 1, 2024, the Permittee is authorized to discharge non-contact cooling water from the air conditioning chilled water system through Outfall Serial No. 001.

**1. Effluent Limitations and Monitoring Requirements**

The Permittee is authorized to discharge non-contact cooling water from the air conditioning chilled water system through Outfall Serial No. 001. The discharge shall be limited and monitored by the Permittee as specified below:

Effluent Characteristics	Discharge Limitations			Monitoring Requirements	
	Daily Maximum	Annual Geometric Mean	Units	Measurement Frequency	Sample Type
Flow	1	1	MGD	1/Month	Estimated
Total Nitrogen	1	---	µg/L	1/Month	Grab <sup>3</sup>
	---	3.25 <sup>2</sup>	lbs/day	1/Year	Calculated
Total Phosphorus	1	---	µg/L	1/Month	Grab <sup>3</sup>
	---	0.434 <sup>2</sup>	lbs/day	1/Year	Calculated
Ammonia Nitrogen	1	---	µg/L	1/Month	Grab <sup>3</sup>
	---	253 <sup>4</sup>	µg/L	1/Year	Calculated
Temperature	30.0°C and shall not vary more than 1°C from ambient conditions		°C	1/Month	Grab <sup>3</sup>
pH	7.0 - 8.6		SU	1/Month	Grab <sup>3</sup>

--- = Not applicable.

MGD = million gallons per day

mg/L = milligrams per liter

lbs/day = pounds per day

µg/L = micrograms per liter

°C = degrees Centigrade

<sup>1</sup> No effluent limitation, only monitoring required.

<sup>2</sup> Compliance with mass-based effluent limitations shall be determined using the following formula:

lbs/day = 8.34 \* annual geometric mean concentration (mg/L) \* annual average flow (MGD)

<sup>3</sup> "Grab sample" means an individual sample collected at a randomly-selected time over a period not exceeding 15 minutes.

<sup>4</sup> This value is an intake credit. Exceedances of the intake credit value represents violations of the following effluent limitation:

Parameter	Annual Geometric Mean	Units
Ammonia Nitrogen	6.0	µg/L

**2. Prohibitions**

a. The addition of chemicals to the cooling water influent is prohibited.

b. There shall be no discharge of floatable or visible foam in the effluent.

**3. Monitoring Locations**

Samples taken in compliance with the effluent monitoring requirements shall be taken at a location downstream of any treatment and prior to mixing with any other effluent and the receiving water to allow representative samples of the discharge.

**4. Monitoring Methods**

a. Test procedures for the analysis of pollutants shall conform with regulations published pursuant to Section 304(h) of the Act.

b. Unless otherwise noted in this permit, all pollutant parameters shall be determined according to methods prescribed in 40 CFR Part 136, promulgated pursuant to Section 304(h) of the Act. Applications for the use of alternative test methods shall be submitted according to 40 CFR Part 136.4.

c. The Permittee shall use test methods with detection limits that reflect the applicable numerical limitations as specified in Chapter 11-54 and must be sufficiently sensitive as defined at 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv). For situations where the discharge limitation is below the detection limits of the available test methods, the test method which has the detection limit closest to the discharge limitation shall be used.

**5. Effluent Monitoring Program**

The Permittee shall submit an Effluent Monitoring Program which complies with Parts A and B of this permit to the DOH in accordance with Part C.1 of this permit within 30 calendar days after the issuance date of this permit.

The Program must include at a minimum, but not be limited to the following:

- a. Sampling location map;
- b. Sample holding time;
- c. Preservation techniques;
- d. Test method and method detection level; and
- e. Quality control measures.

The Permittee must continue to implement the current program until the revised program is submitted to DOH. The revised program should be implemented beginning the month it is submitted.

The DOH reserves the right to require the Permittee to revise the program, as appropriate, pursuant toward compliance with the terms and conditions of this permit.

**B. RECEIVING WATER MONITORING REQUIREMENTS**

**1. Monitoring Requirements**

The Permittee shall monitor the receiving water as specified below:

Parameter	Discharge Limitation	Units	Measurement Frequency	Sample Type
Temperature	Monitor and Report Only	°C	1/Month	Grab

Receiving water sampling shall be conducted within 30 minutes from the effluent sampling.

**2. Monitoring Locations**

The Permittee shall monitor the receiving water quality at the following locations:

**a. Ambient Station**

One ambient station shall be monitored. The ambient station shall be a point in the receiving water upstream of Outfall Serial No. 001 and where impacts from the discharge would not be expected. The ambient station shall be monitored at a location dependent on the direction of the tide at the time of sampling.

**b. Compliance Station**

One compliance station shall be monitored. The compliance station shall be at the point in the Ala Wai Canal where the effluent from Yacht Harbor Towers is discharged.

The Permittee shall select the ambient and compliance stations locations and include the locations in the Effluent Monitoring Program described in Part A.5 of this permit.

**3. Basic Water Quality Criteria Applicable to All Waters**

- a. The discharge shall comply with applicable water quality standards for receiving waters adopted by the DOH under HAR, Chapter 11-54, Water Quality Standards, effective November 1, 2014.

- b. The discharge shall not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife and allows recreational activities in and on the water.
- c. All State waters shall be free from pollutants in concentrations which exceed the acute standards in HAR, 11-54-4(c)(3). All State waters shall also be free from acute toxicity as measured using the toxicity tests listed in HAR, 11-54-10, or other methods specified by the DOH.
- d. All State waters shall be free from pollutants in concentrations which on average during any 24-hour period exceed the chronic standards listed in HAR, 11-54-4(c)(3). All State waters shall also be free from chronic toxicity as measured using the toxicity tests listed in HAR, 11-54-10, or other methods specified by the DOH.
- e. All State waters shall be free from pollutants in concentrations which, on average during any 30-day period, exceed the "fish consumption" standards for non-carcinogens in HAR, 11-54-4(c)(3). All State waters shall also be free from pollutants in concentrations, which on average during any 12-month period, exceed the "fish consumption" standards for pollutants identified as carcinogens in HAR, 11-54-4(c)(3).
- f. All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, including:
  - (1) Materials that will settle to form objectionable sludge or bottom deposits;
  - (2) Floating debris, oil, grease, scum, or other floating materials;
  - (3) Substances in amounts sufficient to produce taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters;
  - (4) High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water;

- (5) Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life; and
- (6) Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands.

## C. REPORTING REQUIREMENTS

### 1. Transmittal and Monitoring Results Reporting Requirements

#### a. Certification of Transmittals

Submit all information in accordance with HAR, 11-55-07(b), with the following certification statement by an appropriate signatory:

**"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."**

#### b. Include "NPDES Permit No. HI 0020346" on each transmittal.

Failure to provide the assigned permit number for this facility on future correspondence or transmittals may be a basis for delay of the processing of the document(s).

#### c. Reporting of Discharge and Monitoring Results

- (1) The Permittee shall report monitoring results required under this permit on Discharge Monitoring Report (DMR) forms submitted electronically using NetDMR, or as otherwise instructed by DOH. NetDMR is accessed from: <https://www.epa.gov/netdmr>.
- (2) DMRs shall be submitted electronically no later than the 28th day of the month following the completed reporting period.
- (3) For the purposes of reporting, the Permittee shall use the reporting threshold equivalent to the laboratory's method detection limit (MDL) and must utilize a standard calibration where the lowest standard point is equal to or less than the concentration of the minimum level (ML).
  - (a) The Permittee shall report sample results and calculations at or above the laboratory's ML on DMRs as the measured concentration or calculation.



- (b) The Permittee shall report sample results and calculations below the laboratory's MDL as NODI(B) on the DMR. NODI(B) means that the concentration of the pollutant in a sample is not detected.
- (c) The Permittee shall report sample results and calculations between the ML and MDL as NODI(Q). NODI(Q) means that the concentration of the pollutant in a sample is detected by not quantified.
- (d) For purposes of calculating averages, zero shall be assigned for values less than the MDL and the numeric value of the MDL shall be assigned for values between the MDL and the ML. The resulting average value must be compared to the effluent limitation or the ML, whichever is greater, in assessing compliance.
- (e) When NODI(Q) or NODI(B) is reported for a parameter, the laboratory's numeric ML and MDL for that parameter shall also be noted on the DMR or on an attachment.

- (4) Should there be no discharges during the monitoring period, the DMR form shall so state.

d. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant at location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in 40 CFR Part 136, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form. The increased frequency shall also be indicated.

2. Reporting of Noncompliance, Unanticipated Bypass, or Upset

In case of conflict between the conditions stated here and those in the **"Standard NPDES Permit Conditions"** the more stringent conditions shall apply.

a. Immediate Reporting

The Permittee or its duly authorized representative (40 CFR 122.22) shall immediately report orally the following:

- (1) Any noncompliance or discharge which may endanger the health or the environment;

- (2) Any discharge at a location not authorized in the permit;
- (3) Any discharge of any wastewater not identified in the application filed for the NPDES permit;
- (4) Any unanticipated bypass;
- (5) Any upset; and
- (6) Violation of any discharge limitation specified in Part A of this permit.

**b. Oral Reports**

For reporting required by Parts C.2.a and C.2.b above, the Permittee or its duly authorized representative shall provide oral reports by telephone to the Clean Water Branch at (808) 586-4309 during regular office hours (7:45 a.m. to 4:30 p.m.). Outside of regular office hours, the Permittee or its duly authorized representative shall report orally to the Hawaii State Hospital Operator at (808) 247-2191.

**c. Written Reports**

- (1) For reporting required by Parts C.2.a. and C.2.b. above, a written submission shall also be provided in accordance with Part C.1.e. within five working days of the time the Permittee becomes aware of the circumstances.
- (2) The report shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times; if the non-compliance has not been corrected, the anticipated time it is expected to continue; public notice efforts, if any; clean-up efforts, if any; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the non-compliance.
- (3) The DOH may waive the written report or the five-working day deadline on a case-by-case basis for spills, bypasses, upsets, and violations of daily maximum discharge limitations if the oral report has been received within 24 hours of the non-compliance or when the Permittee's authorized personnel becomes aware of the non-compliance.

- (4) The written report shall be submitted through the CWB Compliance Submittal Form for Individual NPDES Permits and Notice of General Permit Coverages (NGPCs) or as otherwise instructed by the DOH. This form is accessible through the e-Permitting Portal website at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

**d. Other Non-Compliance**

The Permittee shall report all other instances of noncompliance not mentioned above at the time DMRs are submitted. The noncompliance reports shall contain the information requested in Part C.2.c.(2) of this permit.

**3. Schedule of Submission**

The Permittee shall submit reports to the DOH as specified below.

<b>Report</b>	<b>Reporting Period</b>	<b>Report Due Date</b>
Discharge Monitoring Report	1/Month	28 <sup>th</sup> day of the month following completed reporting period
Effluent Monitoring Program	1/Permit Term	30 days after the effective date of this permit

Signed copies of reports required by this permit, except DMRs, shall be submitted to the DOH through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs unless otherwise directed by the DOH. This form is accessible through the e-Permitting Portal website at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

**D. OTHER REQUIREMENTS**

**1. Schedule of Maintenance**

The Permittee shall submit a schedule to the DOH at least 14 days prior to any maintenance of facilities, which might result in exceedance of effluent limitations. The schedule shall contain a description of the maintenance and its reason; the period of maintenance, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent occurrence of noncompliance.

**2. Permit Reopener**

This permit may be reopened and modified, in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information, including but not limited to changes in operational status and cooling water intake information.

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E. LOCATION MAP

Figure 1

